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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,022	11/01/2000	David Roy Kendall	TS-7568 (US)	2088

7590

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EXAMINER

TOOMER, CEPHIA D

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/704,022

Applicant(s)

KENDALL, DAVID ROY

Examiner

Cephia D. Toomer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The finality of the last Office Action is withdrawn. The Office Action is in response to the Appeal Brief filed December 26, 2002.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 7-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuentes-Afflick (US 6,203,584).

Fuentes-Afflick teaches a fuel additive comprising at least one amine group wherein the amine may be of formula $R_3NH-(R_4-NH)_n-H$ wherein R_3 is hydrocarbyl having a number average molecular weight of about 700 to 3000. The compound reads on the amines of the present invention when R_3 is as stated above and n is 0 (see col. 7, lines 52-61). The hydrocarbyl group may be a polyisobutenyl or polyisobutyl group (see col. 4, lines 20-23). The composition may also contain another amine such as hydrocarbyl polyoxyalkylene aminocarbamate containing at least one basic nitrogen atom and having an average molecular weight of about 500 to 10,000. The hydrocarbyl group contains from 1 to 30 carbon atoms (see col. 9, lines 44-58; col. 10, lines 7-16).

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Fuentes-Afflick teaches that the additives are present in a fuel in amounts from about 50 to 5000 ppm (see col. 13, lines 12-16). The fuel may also contain conventional additives (see col. 13, lines 43-40).

Fuentes-Afflick differs from the claims in that he does not specifically teach that both amines are present in the composition, or the claimed ratio of the amines. However, it would have been obvious to one of ordinary skill in the art to have used both amines because Fuentes-Afflick teaches that at least one amine may be used in the composition, and this suggests that more than one amine could be present in the composition.

Furthermore, it is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. *In re Kerkhoven*, 205 USPQ 1069 (CCPA 1980).

It would have been obvious to one of ordinary skill in the art to have prepared the amines in the claimed weight ratio because Fuentes-Afflick teaches that both amines may be used in the additive concentrate and this teaching clearly suggests a ratio of at least 1:1.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuentes-Affleck (US 6,203,584) as applied to claims above, and further in view of EP 0 534 551.

Fuentes-Affleck has been discussed above. The primary reference fails to teach that the composition contains an anti-corrosion additive. However, EP teaches this difference in a similar composition (see abstract; page 7, lines 26-30).

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It would have been obvious to one of ordinary skill in the art to have prepared the composition wherein an anti-corrosion additive is present because Fuentes-Affleck teaches that conventional additives may be included in his composition and EP teaches that such additives include anti-corrosion inhibitors.

Claims 1-5, and 7-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 9112303.

WO teaches a fuel composition comprising a fuel additive comprising a hydrocarbyl poly(oxyalkylene) aminocarbamate having at least one basic nitrogen and an average molecular weight of about 1,000 to about 3,000, and a branched-chain hydrocarbyl amine having at least one basic nitrogen and an average molecular weight of about 300 to about 700 (see page 10, lines 3-15). The fuel composition comprises about 400-1,200 ppm of the fuel additive (see page 10, lines 22-25). The hydrocarbyl group of the poly(oxyalkylene) aminocarbamate has from 1 to 30 carbon atoms (see page 13, lines 9-32). The hydrocarbyl moiety of the branched-chain amine is derived from olefin polymers such as polyisobutylene (see page 17, lines 29-30; page 18, lines 3-5). The amine may be a monoamine (see page 18, lines 16-17). The fuel composition will contain about 100 to 225 ppm aminocarbamate and about 10 to 70 ppm amine. The proportions encompass the claimed weight ratio. WO also teaches that the fuel may contain conventional additives (see page 22, lines 11-19).

WO teaches the limitations of the claims other than the molecular weight of the hydrocarbyl amine. However, a prima facie case of obviousness exist where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled

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in the art would have expected them to have the same properties. *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985). WO teaches that the amine has a molecular weight of about 300 to about 700. About 700 clearly reads on or is close enough to the claimed 750 to render the claimed molecular weight to be obvious.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 9112303 as applied to claims above, and further in view of EP 0 534 551.

WO has been discussed above. The primary reference fails to teach that the composition contains an anti-corrosion additive. However, EP teaches this difference in a similar composition (see abstract; page 7, lines 26-30).

It would have been obvious to one of ordinary skill in the art to have prepared the composition wherein an anti-corrosion additive is present because WO teaches that conventional additives may be included in the composition and EP teaches that such additives include anti-corrosion inhibitors.

Response to Arguments

5. Applicant's arguments filed have been fully considered but they are not persuasive.

Applicant argues that Fuentes-Afflick contains no suggestion or motivation for combining the aminocarbamate and monoamine. Applicant argues that Fuentes-Afflick contains no suggestion for using the additive to improve storage stability.

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Fuentes-Afflick clearly teaches that at least one of the amine compounds must be present in the composition. The language "at least one" suggests that Fuentes-Afflick contemplates using both amine compounds.

Applicant's argument regarding Fuentes-Afflick being directed to solving a different problem has been considered but is not deemed to be persuasive. The "reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant". See MPEP 2144. Fuentes-Afflick teaches a composition that is similar to that of the present invention and it would be reasonable to expect that the composition of Fuentes-Afflick would possess similar properties.

Applicant states that the molecular weight of the hydrocarbyl amine of the present invention could be considered to overlap the lower range of WO, but there is no suggestion to extend the molecular weight range of WO to as high as 3,000.

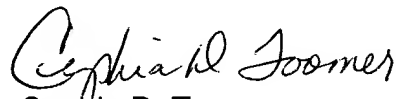
It is well settled that in the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art a prima facie case of obviousness exists. *In re Wertheim*, 191 USPQ 90 (CCPA 1976). It is not necessary for the compounds of WO to have a molecular weight as high as 3,000 or more to render obvious the claimed molecular weight.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 703-308-2509. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Cephia D. Toomer
Primary Examiner
Art Unit 1714

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March 26, 2003